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**JOINT ADVANCED WARFIGHTING SCHOOL**



**ENHANCING JOINT WARFIGHTING READINESS THROUGH CONDUCT OF  
FOREIGN DISASTER RELIEF OPERATIONS**

**by**

**Mark W. McCulloch**

***Commander, U.S. Navy***



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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College or the Department of Defense.

This paper is entirely my own work except as documented in footnotes.

Signature: 

**26 March 2014**

**Thesis Adviser:**

Signature:   
**Dr. R. Gribling, Thesis Advisor**

**Approved by:**

Signature:   
**Dr. S. M. Pavelec, Committee Member**

Signature: 

**CAPT S. Guiliani, USN, Committee Member**

Signature: 

**Richard Wiersema, Colonel, USA  
Director, Joint Advanced Warfighting School**



## **ABSTRACT**

Throughout the history of the United States military, the nation's leaders have used the armed forces to assist with both domestic and overseas humanitarian assistance and disaster relief operations, but it is only in the past 10 years, that national strategic documents have identified these operations as a primary mission for the U.S. military. With this elevation of disaster relief operations to a primary military mission, critics have raised a number of concerns with the use of military forces for these operations. Of these concerns, division of training focus has been a dominant recurring theme. While these concerns deserve due consideration, there are also potential benefits to the warfighting readiness of participating military forces that can mitigate or even outweigh the negative consequences. Therefore, this paper argues that although some combat skill sets will degrade over a unit's extended employment for disaster relief operations, with proper doctrine and force assignment, other joint warfighting skills will be exercised and enhanced, generally resulting in an overall stronger warfighting readiness for the participating units.

To explore this thesis, this paper evaluates three case studies: Operation Unified Assistance, Operation Unified Response, and Operation Tomodachi. The research shows that although they do not employ all of the skill required for combat, disaster relief operations are complex contingency operations that provide unique training opportunities while furthering U.S. national interests. In a budget environment of decreasing resources for dedicated training, it is vital that the armed forces leverage these operations for maximum training benefit while remaining cognizant of mitigations required to maintain full-spectrum combat capability.

## **DEDICATION**

This thesis is dedicated to my wife and kids who supported me throughout the hours I spent in the library instead of home with them.

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Thank you, also, to the tens of thousands of Americans, military and civilian, who have gone forward into disaster areas to save countless lives. In particular, thank you to COL Timothy McAteer and LTC Eric Flesch who shared their personal observations from their time in Haiti.





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## **CHAPTER 1:**

### **INTRODUCTION**

#### ***Background***

Throughout the history of the United States military, the nation's leaders have used the armed forces to assist with both domestic and overseas humanitarian assistance and disaster relief operations. Examples include post-volcanic eruption support to Martinique and St. Vincent in 1902, earthquake response in Iran in 1962, and post-typhoon efforts in Bangladesh in 1991.<sup>1</sup> It is only in the past 10 years, however, that the country's leadership has identified these operations as a primary mission for the U.S. military, as exemplified by the most recent National Security Strategy listing humanitarian assistance and disaster relief operations as key supporting activities for the National Military Objective to "Strengthen International and Regional Security."<sup>2</sup> Similarly, the 2012 Defense Strategic Guidance lists "Conduct Humanitarian, Disaster Relief, and Other Operations" as one of ten "Primary Missions of the U.S. Armed Forces," alongside more traditional missions such as counter-terrorism and deterring/defeating aggression.<sup>3</sup>

#### ***Arguments Against Military Disaster Relief Operations***

With the elevation of disaster relief operations to a primary military mission, critics have raised a number of concerns with the use of military forces for these

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<sup>1</sup> U.S. Joint Chiefs of Staff, *Foreign Humanitarian Assistance*, Joint Publication 3-29 (Washington DC: Joint Chiefs of Staff, March 17 2009), I-1.

<sup>2</sup> U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America, 2011: Redefining America's Military Leadership* (Washington DC: Government Printing Office, February 8 2011), 15.

<sup>3</sup> Secretary of Defense, *Sustaining U.S. Global Leadership: Priorities for 21<sup>st</sup> Century Defense* (Washington DC: Government Printing Office, January 3 2012), 6.

operations. Major concerns include the loss of opportunity to train the skills needed for potential combat operation, dilution of leadership focus, increased operational tempo on supporting forces, and reduction in available reserve forces for other contingencies.

Of these concerns, division of training focus has been a dominant recurring theme. As stated by LtCol David Walter in his appropriately titled article “Warfighters Fight, Humanitarians Assist – Time to Match the Right Force to Humanitarian Assistance,”

Military units, from top to bottom, have spent an incredible amount of time preparing for HA/DR. As a result, we are experiencing a cost in operational focus. We now have a bi-focus, one that forces us to prepare Marines for the ‘utmost savagery’ of combat on one hand, and for situations better suited for a police officer or social worker on the other.<sup>4</sup>

Even joint doctrine, while supporting the national strategic direction that military forces will be used for disaster relief operations, stresses that the fundamental purpose of military power is to deter or wage war: “While leaders may employ this power in more benign ways for a variety of important purposes across a wide range of situations, they must understand that these other uses can imperil this Nation’s fundamental ability to wage war.”<sup>5</sup>

A related concern is that by assigning forces to disaster relief operations, especially the most ready and responsive units, flexibility is significantly reduced to respond to other potential crises. For example, the deployment of the 2<sup>nd</sup> Brigade Combat Team, 82<sup>nd</sup> Airborne Division to Haiti in January 2010 committed the Army’s Global Response Force, the force trained and positioned to be able to deploy within hours

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<sup>4</sup> David Walter, “Warfighters Fight, Humanitarians Assist – Time to Match the Right Force to Humanitarian Assistance,” *Marine Corps Gazette* 82, no. 4 (April 2008): 40.

<sup>5</sup> U.S. Joint Chiefs of Staff, *Doctrine for Joint Operations*, Joint Publication 3-0 (Washington DC: Joint Chiefs of Staff, August 11 2011): I-1.

of an emergency. Although it did not impact the scheduled combat rotations of units to Iraq and Afghanistan, it decreased flexibility of national leadership to surge additional combat power to those countries or an emergent region.<sup>6</sup>

### ***Positive Argument for Military Disaster Relief Operations***

While these concerns about employment of U.S. military forces for disaster relief operations deserve due consideration, there are also potential benefits to the warfighting readiness of participating military forces that can mitigate or even outweigh the negative consequences discussed above. Therefore, this paper argues that although some combat skill sets will degrade over a unit's extended employment for disaster relief operations, with proper doctrine and force assignment, other joint warfighting skills will be exercised and enhanced, generally resulting in an overall stronger warfighting readiness for the participating units.

### ***Research Approach***

This paper presents three case studies of military disaster relief operations conducted over the past decade. These case studies are Operation Unified Assistance, the response to the December 2004 tsunami that impacted Indonesia, Thailand, and Sri Lanka; Operation Unified Response, the response to the January 2010 Haiti earthquake; and Operation Tomodachi, the response to the March 2011 Japan earthquake and tsunami.

For each case study, a comparison is made between the actions performed by the participating military units during the disaster relief operation and their assigned combat functions. This comparison highlights which tactical functions are exercised during

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<sup>6</sup> Michelle Tan and Joe Gould, "Haiti Mission Exhausts Army's Force Flexibility," *Army Times*, February 8, 2010.

disaster relief operations and which are likely to degrade. Following the three case studies, chapter 5 explores findings across the case studies within the framework of the joint functions, including development of regional relationships and intelligence, experience in joint and coalition operations, improvement of interagency coordination, and flexing of command and control organizations. Although this paper focuses on the impact of disaster relief operations on training and proficiency, the fiscal cost and means of funding are also evaluated to assess the impact on other fiscal requirements.

### ***Limitations of Research***

This paper does not reconsider the decision to elevate HA/DR to a primary military mission, but considers disaster relief a directed mission and focuses on the impact of the resulting operations on combat readiness. Additionally, the analysis in this paper is limited in scope to military participation in relief operations following major overseas natural disasters. It does not directly evaluate the impact of defense support to civil authorities (DSCA) in response to domestic emergencies, which has similar, but distinct doctrine and authorizations. Similarly, it does not include planned humanitarian assistance missions, such as the periodic deployment of Hospital Ships to provide medical assistance to lesser-developed countries or combined security assistance missions such as Africa Partnership Station. In the case study of the Japanese earthquake and tsunami, actions concerned exclusively with the failure of the Fukushima Dai-ichi nuclear power plant are excluded due to narrow applicability to disaster response operations in general. All discussions are based on unclassified sources. For Official Use Only reports were consulted in the research for this paper, but only unrestricted information is referenced.

## **CHAPTER 2:**

### **INDIAN OCEAN TSUNAMI RELIEF**

#### ***Overview of Disaster and Response***

On 26 December 2004, a magnitude 9.0 earthquake shook the Indian Ocean off the west coast of Sumatra, Indonesia. The earthquake generated a massive tsunami that inundated twelve countries around the rim of the Indian Ocean, including severe damage to areas in Indonesia, Sri Lanka, the Maldives, India, and Thailand. Over 250,000 people died from the tsunami and its immediate aftermath with additional millions displaced or deprived of necessities for survival.<sup>1</sup> The extent of damage quickly mobilized pledges of support from around the world, including the United States.

U.S. military support to the disaster relief operation was primarily sea- and air-based, in part due to sensitivities in many of the affected countries over having foreign military ground troops in their country. Maritime patrol aircraft and the aircraft carrier USS *Abraham Lincoln* (CVN 72) constituted the initial response, increasing to 17 ships, 75 aircraft, and over 11,600 personnel by mid-January, the largest U.S. military disaster relief operation conducted to date.<sup>2</sup> The U.S. military assisted in Thailand, Indonesia, Sri Lanka, and the Maldives. India was also heavily affected, but had enough indigenous capability that support from outside militaries was not requested.<sup>3</sup> By mid-February, the

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<sup>1</sup> Rhoda Margesson, *Indian Ocean Earthquake and Tsunami: Humanitarian Assistance and Relief Operations* (Washington DC: Congressional Research Service, March 21 2005), 1.

<sup>2</sup> Ibid., 10.

<sup>3</sup> Ibid., 28.



U.S. military had flown over 1800 aircraft sorties, evacuated 3,000 people, and delivered over twenty-four million pounds of relief supplies.<sup>4</sup>

### ***Command and Control from Thailand***

The U.S. Pacific Command (PACOM) commander established Joint Task Force (JTF) 536 on 28 December and assigned the commanding general of the 3<sup>rd</sup> Marine Expeditionary Force, Lieutenant General Robert R. Blackman, Jr, as the commander. On 3 January, PACOM changed the designation to Combined Support Force (CSF) 536 to communicate the growing multinational character of the operation and the “support” mission.<sup>5</sup> Blackman established three subordinate Combined Support Groups (CSG), CSG-Indonesia, CSG-Sri Lanka, and CSG-Thailand, to direct relief efforts within their respective countries.<sup>6</sup> Simultaneously, Major General David Deptula, Director of Air and Space Operations for the Pacific Air Forces, was designated as the Joint Forces Air Component Commander (JFACC), headquartered at Hickam Field, Hawaii, to coordinate air support throughout the relief area.<sup>7</sup>

CSF-536 and CSG-Thailand set up headquarters in Utapao, Thailand, taking advantage of previous experience running the annual Cobra Gold United States-Thailand bilateral military exercises from that location.<sup>8</sup> In support of these staffs, the Air Force 374<sup>th</sup> Communications Squadron deployed to Utapao, establishing communications

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<sup>4</sup> Bruce A. Elleman, *Waves of Hope: The U.S. Navy's Response to the Tsunami in Northern Indonesia* (Newport, RI: Naval War College, February 2007), 92.

<sup>5</sup> Ibid., 8.

<sup>6</sup> Daren K. Margolin, “Humanitarian Assistance/Disaster Relief Operations,” *Marine Corps Gazette*, 89, no. 10 (October 2005): 10.

<sup>7</sup> U.S. Air Force, *With Compassion and Hope: The Story of Operation Unified Assistance* (Hickam Air Force Base, Hawaii: Office of History, Headquarters, Pacific Air Forces, January 2006), 23.

<sup>8</sup> Elleman, 9.

support on 28 December.<sup>9</sup> Although the tsunami killed over 8,000 people in Thailand, damage to infrastructure, including transportation, electricity, water, and communications, was relatively light compared to other affected countries.<sup>10</sup>

On 29 December, Navy P-3 maritime patrol aircraft started reconnaissance flights from Utapao to assist both the government of Thailand and CSG-Thailand in scoping the damage and planning assistance missions.<sup>11</sup> The same day, Air Force planes, including a C-135 with the Air Force forward command element and C-130s from the 36<sup>th</sup> Airlift Squadron arrived in Utapao while two MC-130s from the 17<sup>th</sup> Special Operations Squadron flew to Bangkok International Airport to pick up relief supplies already accumulating there.<sup>12</sup> These aircraft assisted the Thai military in distributing relief supplies to affected areas within Thailand, and also transported the Disaster Relief Assessment Teams (DRAT) to Sri Lanka and Indonesia to extend relief to those areas as well.<sup>13</sup> By early January, Utapao air base had grown into a logistics hub and primary command and control location for the region-wide relief effort, with CSF-536, the United Nations, the World Food Program, the World Health Organization, and representatives from Japan and Singapore all working out of the base.<sup>14</sup> Air Mobility Command increased the airlift capacity by assigning six C-5 Galaxy aircraft from Kadena Air Base in Japan to support and forward deployed an additional five C-17 transport aircraft to

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<sup>9</sup> U.S. Air Force, *With Compassion and Hope*, xi.

<sup>10</sup> Margesson, 30.

<sup>11</sup> Elleman, 9.

<sup>12</sup> U.S. Air Force, *With Compassion and Hope*, 76.

<sup>13</sup> Elleman, 9.

<sup>14</sup> Margesson, 31.

Utapao.<sup>15</sup> The missions performed by all of these aircraft were very similar to the types of operations they would be assigned in support of combat operations, providing excellent training for aircraft missions in a dynamic, complex, operational environment.

By 15 January, CSF-536 determined that the “stop-the-bleeding phase” of operations in Thailand had been reached and the “conditions for transition from U.S. military to host-nation military control of operations ... have been met.”<sup>16</sup> CSG-Thailand completed operations on 22 January and was disestablished, although support from Utapao to operations in other affected nations continued for several more weeks.<sup>17</sup>

### ***Response in Sri Lanka and Maldives***

The tsunami damage to Sri Lanka was especially severe with nearly 70 percent of the coastline damaged and over 31,000 people killed.<sup>18</sup> Additionally, the disaster displaced over 440,000 people and destroyed much of the coastal infrastructure. CSF-536 designated Brigadier General Frank A. Panter, Commanding General of the 3<sup>rd</sup> Force Service Support Group, as CSG-Sri Lanka. The Disaster Relief Assessment Team (DRAT) arrived in Colombo, Sri Lanka on 28 December, followed by Panter and lead elements of his team on 2 January.<sup>19</sup> In addition to traditional headquarters functions, CSG-Sri Lanka established a Combined Disaster Relief Center (CDRC) to serve as “a single, accessible point of contact for all external organizations” including the Government of Sri Lanka’s Center for National Operations, the United Nations, U.S. Agency for International Development (USAID), international organizations, and non-

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<sup>15</sup> Elleman, 9.

<sup>16</sup> Ibid., 31.

<sup>17</sup> Ibid., 119.

<sup>18</sup> Margesson, 23.

<sup>19</sup> Margolin, 10.

government organizations (NGOs). They modeled this organization after Civil-Military Operations Centers (CMOC) conducting the same functions in Iraq and Afghanistan.<sup>20</sup>

The first relief supplies arrived on 4 January, delivered by HH-60 helicopters from the Air Force 33<sup>rd</sup> Rescue Squadron. They were joined the next week by Marine Corps CH-46 helicopters flown from the USS *Duluth* (LPD 6) which had been redirected from its transit to Iraq. The *Duluth* and its helicopters departed Sri Lanka on 16 January, but were replaced by Marine Corps and Coast Guard C-130s, permitting the distribution of 40,000 pounds of relief supplies per day.<sup>21</sup> The missions performed by these aircraft, delivering personnel and materials within the area of operations, including to austere landing zones, provided practical training for the similar missions they would be assigned in combat operations.

In addition to distributing aid, military forces from the Marine Corps 9<sup>th</sup> Engineer Support Battalion and Navy Seabees from Naval Construction Battalion 7 flew in heavy engineering equipment to assist with recovery. Over three weeks, these units demolished twenty unsafe buildings and cleared debris from twenty-three schools and Buddhist temples. They also repaired a damaged seawall and pumped out contaminated wells to restore fresh water supplies for the Sri Lankans in Galle.<sup>22</sup> These projects were similar to ones that might be assigned to engineering units during the recovery and reconstruction phase of a combat operation.

CSG-Sri Lanka also led relief support in the Maldives, an archipelago of over a thousand islands and atolls located 495 miles southeast of Sri Lanka. Over half of the

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<sup>20</sup> Ibid., 10.

<sup>21</sup> Ibid., 11-12.

<sup>22</sup> Ibid., 12.

198 inhabited islands were severely damaged with twenty completely destroyed. Naval Beach Group One worked with two Maritime Prepositioning Squadron Three ships, the USNS *Lummas* and USNS *Bonnyman*, to render aid. The relief effort included several innovative uses of embarked equipment, including placing reverse osmosis units onboard mechanized landing craft to produce a total of 101,699 gallons of fresh water. They also used light amphibious resupply, cargo, (LARC) vehicles to transport relief supplies across thick coral reefs blocking traditional landing craft from reaching some of the islands.<sup>23</sup> Although some of the innovative uses of the equipment were not in accordance with established doctrine, the overall operation was very similar to the Naval Beach Group's wartime mission of delivering supplies from ships across the beach to support forces operating ashore.

By mid-January CSF-536 decided that the critical needs had been met in Sri Lanka and directed transition of operations to Sri Lankan authorities. CSG-Sri Lanka ended its operations on 28 January, having delivered over six hundred thousand pounds of relief supplies.<sup>24</sup>

### ***Response in Indonesia***

The Indonesian island of Sumatra was closest to the epicenter of the earthquake, so its northern end, especially the province of Aceh, was devastated by multiple tsunami waves, as tall as fifty feet, along its 200-mile coastline. Consequences included almost a quarter of a million people killed or missing and near total destruction and isolation of towns and villages throughout the coastal area.<sup>25</sup> Lead elements of CSG-Indonesia, under

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<sup>23</sup> Ibid., 13.

<sup>24</sup> Elleman, 31.

<sup>25</sup> Margesson, 21.

the command of Marine Brigadier General Christian B. Cowdrey, set up a headquarters in Medan, Aceh, on 30 December and established coordination with local authorities. Once the Abraham Lincoln Carrier Strike Group (CSG) arrived off the coast on 1 January, however, the strike group commander, Rear Admiral Douglas Crowder, had much better communications and situational awareness, making him the primary decision maker for relief operations in Indonesia.<sup>26</sup>

When the tsunami struck, the Abraham Lincoln CSG, including USS *Abraham Lincoln*, USS *Shiloh* (CG 67), USS *Benfold* (DDG 65), USS *Shoup* (DDG 86), and an embarked air wing that included three squadrons of helicopters, was conducting a port visit in Hong Kong. On 28 December, PACOM directed the strike group to get underway and proceed towards the disaster area.<sup>27</sup> Because the Indonesian government placed severe constraints on the presence of foreign military personnel ashore, the Abraham Lincoln CSG was designated as a sea base for relief operations in Aceh, arriving off the coast on 1 January.<sup>28</sup>

Once on station, the CSG immediately started flying its 17 embarked helicopters to provide critically needed aid to the isolated areas. The first flights, conducted by SH-60B *Sea Hawk* helicopters on the day of arrival, conducted surveillance of the damaged areas to identify usable landing zones and established contact with local authorities and aid workers.<sup>29</sup> The flight schedule expanded quickly to include all operational helicopters flying almost continuously during daylight hours to distribute food and water

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<sup>26</sup> Elleman, 32.

<sup>27</sup> Ibid., 32.

<sup>28</sup> Ibid., 36.

<sup>29</sup> Ibid., 57.

from central locations such as the Banda Aceh airport to the outlying landing zones, while the Indonesian military was put in charge of distribution.<sup>30</sup> Additionally, the helicopters located and airlifted injured citizens to the hospital in Banda Aceh or a field station set up by U.S. Navy medical personnel at the airport.<sup>31</sup> These operations provided valuable training to the flight deck and helicopter crews and some medical personnel, but many of the other tactical capabilities of the strike group were not exercised as part of the relief. Some of the key areas not exercised include fixed-wing aircraft operations and sea control functions such as anti-submarine warfare and air defense.

Initially, the Indonesian military refused to allow foreign aircraft to land at Banda Aceh airport, but reversed their position on 1 January, the same day that the Abraham Lincoln CSG arrived. Air Force C-130 aircraft then began flights in Banda Aceh airport delivering supplies for further distribution by helicopters from the U.S. military and other nations.<sup>32</sup> An Air Force team simultaneously worked to certify the airport to operate C-17 aircraft, which could each carry over four times the cargo of a C-130, with C-17 flights starting on 11 January.<sup>33</sup>

When the tsunami struck, the Bonhomme Richard Expeditionary Strike Group (ESG) was conducting operations near Guam. The ESG, including the USS *Bonhomme Richard* (LHD 6), USS *Rushmore* (LSD 47), USS *Milius* (DDG 69), USS *Bunker Hill* (CG 52), USS *Thach* (FFG 43), a Marine Expeditionary Unit (MEU), and 25 CH-46 and CH-53 helicopters, loaded supplies in Guam and then proceeded towards the Indian

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<sup>30</sup> Margesson, 21.

<sup>31</sup> Elleman, 61.

<sup>32</sup> Margesson, 21.

<sup>33</sup> Elleman, 34.

Ocean, arriving off Meulobah, Indonesia, on 6 January.<sup>34</sup> The embarked helicopters offloaded relief supplies and then joined the aircraft from the Abraham Lincoln CSG in distributing aid from the Banda Aceh airport to isolated villages, many of which were completely isolated due to damaged roads and bridges.<sup>35</sup> In addition to airborne aid delivery, the embarked Marines transported pallets of food and water by U.S. Navy Landing Craft Air Cushion (LCAC) to the beach in Meulaboh where they were transferred to Indonesian military trucks for further distribution.<sup>36</sup> Aid delivery by aircraft and landing craft exercised capabilities that would be used to execute an amphibious assault, the ESG's primary mission, but the Indonesian resistance to landing a large number of Marines limited the scope of the training value for the embarked MEU.

USS *Essex* (LHD 2), with embarked helicopters, and USS *Fort McHenry* (LSD 43), with LCACs, arrived on 18 January, taking over the functions of the Bonhomme Richard ESG and allowing it to depart the area. During the same period, the hospital ship USNS *Mercy* (T-AH 19) was transiting from San Diego to the disaster area, arriving off Indonesia on 3 February. Although the *Mercy* did not arrive early enough to play a major role in treating those injured during the tsunami, it succeeded in activating from a reduced operating status and deploying for the first time in thirteen years, exercising the very skills that would be required for a wartime activation such as had occurred for Operation Desert Storm in 1990.<sup>37</sup> On 3 February, the Abraham Lincoln CSG redeployed from Operation Unified Assistance, followed by USS *Essex* and USS *Fort*

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<sup>34</sup> Ibid., 33.

<sup>35</sup> Ibid., 56.

<sup>36</sup> Ibid., 38.

<sup>37</sup> Ibid., 80.



*McHenry* on 9 February.<sup>38</sup> PACOM then disestablished CSG-Indonesia on 10 February, although the *Mercy* continued supporting Indonesian medical providers until mid-March when they recovered full medical capability.<sup>39</sup> CSF-536 continued operating in Utapao, Thailand, until disestablished on 23 February, officially ending Operation Unified Assistance.<sup>40</sup>

### ***Summary***

Overall, Operation Unified Assistance successfully provided critical support to the victims of the Indian Ocean tsunami while exercising key capabilities of the U.S. military. In particular, it flexed the unique capability of the United States to conduct sustained operations at long distances from logistical support over a widespread area. The ability of the Air Force and other services to develop a system of aircraft delivery of aid to the damaged areas was key to saving lives. Additionally, the response provided one of the first real-world opportunities to exercise the operational concept of sea-basing forces by conducting almost all operations in Indonesia from ships at sea with no ground forces remaining ashore overnight.

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<sup>38</sup> *Ibid.*, 120.

<sup>39</sup> *Ibid.*, 85.

<sup>40</sup> *Ibid.*, 89.

## **CHAPTER 3:**

### **HAITI EARTHQUAKE RELIEF**

#### ***Overview of Disaster and Response***

On 12 January 2010, a magnitude 7.0 earthquake centered about 15 miles southwest of Port-au-Prince, Haiti, devastated the already struggling nation and created a critical humanitarian crisis. The disaster displaced over 1.2 million people and killed close to a quarter of a million people. Severe damage to the nation's infrastructure, including port facilities, roads, government buildings, and hospitals degraded the ability of the Haitian government to address the immediate needs of the population.<sup>1</sup> Damage to Port-au-Prince included disablement of the Toussaint L'Ouverture International Airport control tower and destruction of over half the seaport's piers and cargo handling equipment.<sup>2</sup>

The government of Haiti immediately requested assistance from the United States to help stabilize the country and facilitate recovery efforts. Coincidentally, Lieutenant General P. K. Keen, Deputy Commander of U.S. Southern Command (SOUTHCOM), was already in Haiti when the earthquake hit. The SOUTHCOM commander designated Keen to lead what became Joint Task Force – Haiti (JTF-H) and direct Operation Unified Response, the U.S. military disaster relief response to the earthquake. He began meeting with Haitian government officials on 13 January as U.S. forces began to flow into the theater. SOUTHCOM formally established JTF-H on 14 January 2010 to conduct

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<sup>1</sup> Rhoda Margesson and Maureen Taft-Morales, *Haiti Earthquake: Crisis and Response* (Washington DC: Congressional Research Service, March 8 2010), 1.

<sup>2</sup> Douglas M. Fraser and Wendell S. Hertzelle, "Haiti Relief: An International Effort Enabled Through Air, Space, and Cyberspace." *Air & Space Power Journal* 24 (April 2010): 5.

humanitarian assistance and disaster relief operations in support of the United States Agency for International Development (USAID), the lead U.S. federal agency.<sup>3</sup>

Operation Unified Response developed into the largest disaster relief operation in the history of the U.S. military, increasing to over 22,000 service members, 58 aircraft, and 23 ships by early February 2010.<sup>4</sup> By March 2010, U.S. military forces had delivered over 17 million pounds of food and 2.6 million liters of water, and cared for almost 10,000 medical patients.<sup>5</sup> JTF-H formally transitioned responsibilities to SOUTHCOM Coordination Cell and Theater Security Cooperation activities in early June 2010 and was disestablished as a JTF.<sup>6</sup>

### ***Land-based Responding Forces***

To provide an experienced, corps-level staff to support the operation, XVIII Airborne Corps assault command post deployed to form the core of the JTF-Haiti headquarters.<sup>7</sup> Similarly, the Army Global Response Force, consisting of the 82<sup>nd</sup> Airborne 2<sup>nd</sup> Brigade Combat Team (BCT)<sup>8</sup> was ordered to immediately deploy to Haiti to maintain security and facilitate provision of humanitarian aid. Lead elements of 2<sup>nd</sup> BCT arrived in Haiti on 14 January, less than 48 hours after the earthquake.<sup>9</sup> Each of the

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<sup>3</sup> P.K. Keen et al. "Foreign Disaster Response: Joint Task Force Haiti Observations." *Military Review* 90, no. 6 (November/December 2010): 86.

<sup>4</sup> Ibid., 85.

<sup>5</sup> Paul Clarkson, Michael Hanson, and Erin L. Boyce. "The Big One: Naval Aviation Brings Relief to Earthquake-Ravaged Haiti." *Naval Aviation News* 92, no. 2 (July 2010): 12.

<sup>6</sup> Keen et al., 87.

<sup>7</sup> James A. Vohr. "Haiti Disaster Relief: Logistics is the Operation." *Military Review* 91, no. 4 (July 2011): 79.

<sup>8</sup> A Brigade Combat Team (BCT) is the U.S. Army's primary deployable combat unit, consisting of a Headquarters element supported by a Brigade Support Battalion and five operational battalions. In the case of 2<sup>nd</sup> BCT, the operational battalions consisted of two Airborne Infantry Battalions, a Reconnaissance Battalion, and Artillery Battalion, and a Brigade Special Troops Battalion.

<sup>9</sup> Keen et al., 88.

five main battalions established a forward operating base in different parts of Port-au-Prince to expand aid coverage.<sup>10</sup> For the first two weeks, they focused on providing basic human needs and providing security at the aid distribution sites to save as many Haitians as possible from immediate harm. In later weeks, the military pushed larger food packages to the people to allow a shift in focus to rebuilding.<sup>11</sup> Meanwhile, the 407<sup>th</sup> Brigade Support Battalion established life support areas and coordinated distribution of logistics support to the other 2<sup>nd</sup> BCT battalions.<sup>12</sup>

Some battalion combat-specific tactical functions were not exercised; for example, the artillery battalion did not operate artillery in Haiti. However, this no-notice deployment of the Global Response Force provided valuable training in many of the other skills that would be required in a similar rapid-response deployment to a combat zone. The assigned battalions exercised rapid assembly and deployment to an austere environment where they quickly had to establish operating bases and logistic support while maintaining security against an uncertain threat. The value of this training was described by LTC Matthew Shatzkin, the commander of the 407<sup>th</sup> Brigade Support Battalion:

The deployment was exactly what the battalion needed to validate its preparations. For the previous 18 months, we had trained for the Global Response Force mission ... While this training certainly provided a framework for us to flow into an airfield under both semi-permissive and permissive conditions, the exercises were not large enough to replicate the complexity of real-world operations.<sup>13</sup>

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<sup>10</sup> John S. Laughter and Kissta M. Feldner. "Operation Unified Response." *Soldiers* 65, no. 4 (April 2010): 6.

<sup>11</sup> *Ibid.*, 7.

<sup>12</sup> Matthew P. Shatzkin. "The 407<sup>th</sup> Brigade Support Battalion in Operation Unified Response Expeditionary Logistics." *Military Review* 91, no. 5 (September 2011): 56.

<sup>13</sup> *Ibid.*, 52.

Similarly, the 89<sup>th</sup> Civil Affairs Battalion conducted operations in Haiti from January through April 2010. They established a Humanitarian Assistance Coordination Center (HACC) to enhance communication and alignment of efforts among the military forces, U.S. interagency partners, the United Nations, and international responders. Additionally, they partnered with the Disaster Response Team (DART) from USAID to liaison with UN Office for the Coordination of Humanitarian Affairs (OCHA) and the government of Haiti to provide civil-information management and build a humanitarian common operating picture.<sup>14</sup> The organization and operation of the HACC were modeled after the Civil-Military Operation Centers (CMOC) run by civil affairs battalions in combat zones, such as those coordinating inter-agency efforts in Afghanistan.

To provide sufficient expertise and direction to the growing requirement for logistics and sustainment, the 3rd Expeditionary Sustainment Command deployed from Fort Knox, Kentucky, to Port-au-Prince. The leadership element deployed on 16-17 January, with first operational elements arriving on 27 January.<sup>15</sup> These military logistics experts took charge of Army forces supporting the World Food Program's emergency food distribution operation. For example, 119<sup>th</sup> Inland Cargo Transfer Company loaded, moved, and delivered supplies to designated distribution areas. Similarly, 10<sup>th</sup> Transportation Battalion coordinated movement of aid offloaded from ships to warehouses for further distribution.<sup>16</sup> 377<sup>th</sup> Theater Sustainment Command, a reserve unit, relieved the 3<sup>rd</sup> ESC as the relief effort started to wind down, and coordinated the

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<sup>14</sup> Patrick Blakenship. "Into Haiti." *Special Warfare: The Professional Bulletin of the John F. Kennedy Special Warfare Center and School* 23, no. 5 (September 2010): 25.

<sup>15</sup> Paul R. Hayes. "Deploying an Expeditionary Sustainment Command to Support Disaster Relief," *Army Sustainment* 42, no. 6 (November 2010): 6.

<sup>16</sup> Paul R. Hayes. "A Series of Firsts: The 3<sup>rd</sup> ESC in Operation Unified Response," *Army Sustainment* 42, no. 6 (November 2010): 10.

redeployment of forces no longer required in theater.<sup>17</sup> For these logistics-focused organizations, the experience managing and transporting critical materials throughout a degraded environment provided valuable training in their core warfighting functions. In many cases, the operation in Haiti was under more challenging conditions than recent combat deployments to Iraq where a more complete military infrastructure has been built up.<sup>18</sup>

United States Army South (ARSOUTH) deployed to Haiti on 15 March 2010 and relieved XVIII Airborne Corps. Army forces continued providing shelter and engineering projects while transitioning food and water distribution to international partners.<sup>19</sup>

### ***Aviation Responding Forces***

The response from aviation forces was equally fast. 1<sup>st</sup> Special Operations Wing landed at Toussaint L'Ouverture International Airport within 26 hours of the earthquake and began directing air traffic less than 30 minutes after arriving.<sup>20</sup> On 14 January, additional cargo handlers and logistics technicians from the 817<sup>th</sup> Contingency Response Group arrived from Lakehurst, New Jersey, to support airport operations. Their combined efforts expanded throughput capacity from minimal daylight landings and take-offs to round-the-clock operations supporting up to 140 fixed-wing and 200 rotary-wing flights per day. This rapid airport reopening facilitated early arrival and flexible operation of rescue teams, directly contributing to the rescue of 132 individuals who had

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<sup>17</sup> Michael J. Perez. "The 377<sup>th</sup> Theater Sustainment Command Deployment/Redeployment Coordination Cell in Haiti," *Army Sustainment* 43, no. 1 (January 2011): 12.

<sup>18</sup> Hayes. "Deploying an Expeditionary Sustainment Command," 8.

<sup>19</sup> Keen et al., 87.

<sup>20</sup> Fraser and Hertzelle, 6.

been trapped under rubble.<sup>21</sup> This effort to gain control of the airfield and successfully operate it as a military point of entry quickly after arrival was similar to one of the primary missions of the Special Operations Wing and provided invaluable experience for the airmen involved.

With the airport restored to operation, aircraft from at least 71 military units across the United States were able to support lift into and out of Haiti, including the safe evacuation of 16,412 American citizens and 343 injured Haitians.<sup>22</sup> To coordinate the heavy air traffic into and out of Haiti, Air Mobility Command (AMC) established the Haiti Flight Operations Coordination Center (HFOCC) at Tyndall Air Force Base.<sup>23</sup> Additionally, AMC deployed a Joint Assessment Team to evaluate the suitability of both the Toussaint airport and surrounding airports in Haiti and the Dominican Republic to facilitate expansion of air throughput.<sup>24</sup> Expeditionary security experts from the Phoenix Raven program embarked every AMC flight into and out of Haiti to reinforce aircraft security and prevent disruption and looting of the relief supplies.<sup>25</sup> In each of these cases, the assigned aircrews, staffs, and security personnel executed the missions they had been trained for, moving a wide variety of equipment, materials, and personnel safely in and out of the operating area.

In addition to offloading relief supplies at the airport for ground distribution, four aerial delivery (airdrop) relief missions were completed. The first two, on 18 and 21

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<sup>21</sup> Ibid., 7.

<sup>22</sup> Ibid., 8.

<sup>23</sup> Ellery D. Wallwork, *Operation Unified Response: Air Mobility Command's Response to the 2010 Haiti Earthquake Crisis* (Scott Air Force Base, IL: Air Mobility Command, 2010), 5.

<sup>24</sup> Ibid., 17.

<sup>25</sup> Ibid., 48.

January, dropped 14,000 bottles of water and 14,000 Meals Ready-to-Eat in outlying areas. On 23 January, a USAF C-17s airdropped 14,000 bottles of water and 14,500 emergency rations into an improvised landing zone on the outskirts of Port-au-Prince, while C-130s completed a similar mission farther to the east flying at night with night-vision goggles. All missions were completed without incident, but airdrop missions were discontinued due to Haitian concerns that citizens on the ground could be injured by a wayward parachute.<sup>26</sup> Although not continued on a larger scale, the aircrews that conducted these aerial deliveries gained valuable real-world experience in delivering supplies to support forces unable to be reached by ground-based logistics.

In addition to movement of personnel and supplies, aviation platforms provided critical intelligence, surveillance, and reconnaissance (ISR) support to Operation Unified Response. Navy P-3 aircraft, an Air Force *Global Hawk* unmanned air vehicle (UAV), and an Air Force U-2 began flights over Haiti on 14 January to provide timely data to assess the extent of damage and status of critical infrastructure such as roads, bridges, and key buildings. *Predator* UAVs were added to give round-the-clock video coverage of high-interest areas.<sup>27</sup> In addition to providing vital information to support command and control of the Haiti relief effort, the ISR team gained valuable experience in quickly gathering imagery and establishing a clear understanding of the situation in an emergent area of operations, the same skills they would need in response to contingency combat operations in an unexpected area.

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<sup>26</sup> Ibid., 56.

<sup>27</sup> Fraser and Hertzelle, 9.



### ***Maritime Responding Forces***

Maritime forces also rapidly converged on Haiti to provide immediate relief. USS *Carl Vinson* (CVN 70) arrived on station 15 January, having left Norfolk on 12 January for a transit to San Diego, and immediately began serving as a command and control center and aircraft operating base. Commander, Carrier Strike Group ONE (CCSG-1), embarked on the *Carl Vinson*, was designated as the Joint Forces Maritime Component Commander (JFMCC) for Joint Task Force-Haiti, in charge of all of the afloat assets operating off the coast.<sup>28</sup> The JFMCC forces soon included 22<sup>nd</sup> and 24<sup>th</sup> Marine Expeditionary Units (MEU), embarked on two Amphibious Readiness Groups (ARG), who conducted missions to north and west of Port-au-Prince, bringing relief through amphibious operations.<sup>29</sup> In early February, Commander, Carrier Strike Group Two embarked on USS *Bataan* (LHD 5) and relieved CCSG-1 as JFMCC, allowing USS *Carl Vinson* to detach and continue to San Diego.<sup>30</sup>

The *Bataan* Amphibious Readiness Group (ARG), including USS *Bataan*, USS *Carter Hall* (LSD 50), and USS *Fort McHenry* (LSD 43), had been designated as the ready duty ARG since returning from deployment in December 2009. The assigned Sailors came off post-deployment stand-down to surge forward on 14 January 2010.<sup>31</sup> USS *Bataan* embarked 3 LCACs, while *Carter Hall* and *Fort McHenry* embarked displacement landing craft.<sup>32</sup> The next day, the *Bataan* ARG stopped at Morehead City,

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<sup>28</sup> Willie Robohn. "USS *Bataan* (LHD 5) and the 22MEU Bring Relief to the People of Haiti," *Navy Supply Corps Newsletter* 73, no. 4 (July 2010): 30.

<sup>29</sup> Keen et al., 87.

<sup>30</sup> Robohn, 31.

<sup>31</sup> Ibid., 28.

<sup>32</sup> Ibid., 29.

North Carolina, to embark the 22<sup>nd</sup> MEU. USS *Bataan* embarked a Marine composite squadron consisting of eight CH-53E heavy-lift helicopters, four UH-1N utility helicopters and supporting logistics and air control personnel to form HMH-461 (Reinforced). In addition to the Marine Corps aircraft, the air component included 7 Navy MH-60S and 8 Navy MH-53E helicopters.<sup>33</sup> On 18 January, the first CH-53E reconnaissance flights were conducted over Haiti, and the next day, CH-53E and UH-1N flights started into damaged area to deliver relief supplies and further assess the damage.<sup>34</sup> In one instance, CH-53Es transported sport utility vehicles to remote regions of the country to increase mobility of military and civilian teams working to determine where more aid was needed.<sup>35</sup> Assigned a 61 square kilometer area of operations southwest of Port-au-Prince, the Bataan ARG and 22<sup>nd</sup> MEU established 3 landing beaches and 9 helicopter landing zones to support ship-to-shore movement.<sup>36</sup> Additionally, 22<sup>nd</sup> MEU provided security for international aid organizations at aid distribution sites until the local police could rebuild enough capability to resume the mission.<sup>37</sup>

In addition, the Nassau ARG, consisting of USS *Nassau* (LHA 4), USS *Mesa Verde* (LPD 19), USS *Ashland* (LSD 48), and the 24<sup>th</sup> MEU diverted from its planned deployment to the Mediterranean Sea and Middle East to provide additional amphibious support. The *Nassau*'s air component included 12 MV-22 *Ospreys*, which saw their first use for disaster relief operations, alongside CH-53E, UH-1N, and AH-1W helicopters.

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<sup>33</sup> Ibid.

<sup>34</sup> Clarkson, Hanson, and Boyce, 12.

<sup>35</sup> Ibid., 13.

<sup>36</sup> Robohn, 31.

<sup>37</sup> Ibid., 34.

Before departing to continue its scheduled deployment on 7 February, the Nassau ARG transported over 55,000 pounds of food, 14,600 liters of water, 1000 passengers, and other supplies by aircraft and landing craft operations, providing a key increase in aid distribution in the critical first weeks.<sup>38</sup> Simultaneously, USS *Gunston Hall* (LSD 44) diverted from its transit to Africa for a scheduled Africa Partnership Station deployment and was temporarily attached to the Bataan ARG. The embarked Beach Master Unit detachment established an additional beachhead in Haiti to facilitate movement of personnel and supplies by the embarked Landing Craft Utility (LCU) and Landing Craft Mechanized (LCM).<sup>39</sup>

The amphibious operations performed by the Navy/Marine Corps team across both ARGs provided excellent training in ship to objective maneuver, in addition to its contribution to the relief effort. Establishing beachheads to move personnel, equipment, and materials quickly into an area of operations, while simultaneously moving forces directly to objective areas by shipboard aircraft is the essence of the expeditionary operations the ARG/MEU trains for and paralleled many of the activities that would be required to project Marines Corps forces into a combat area.

In addition to the aircraft carrier and amphibious ships, other available Navy ships were quickly dispatched to the disaster area to provide whatever immediate assistance could be rendered. USS *Normandy* (CG 60) embarked two SH-60B helicopters on 15 January, only three days after the quake, and proceeded to Haiti.<sup>40</sup> USS *Bunker Hill* (CG 52) and USS *Underwood* (FFG 36) similarly were sent to the region with embarked

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<sup>38</sup> Clarkson, Hanson, and Boyce, 14.

<sup>39</sup> Robohn, 30.

<sup>40</sup> Clarkson, Hanson, and Boyce, 14.

helicopter detachments. All of these SH-60B helicopters were used for transportation of response personnel, delivery of food and water from the airport to outlying landing zones, and evacuation of injured Haitians to higher medical facilities. Even without any embarked helicopters, USS *Higgins* (DDG 76), the nearest U.S. Navy unit when the earthquake struck, was diverted from its transit back towards homeport from deployment in the Mediterranean Sea to provide assistance. Even though destroyers have limited HA/DR capability, *Higgins* used its small boats to transport medical patients from shore to ships for helicopter evacuation.<sup>41</sup>

Although the use of these warships was well outside their normal warfighting functions of sea control, air and missile defense, and cruise missile strikes, these skills are normally trained using onboard simulations, so participation in Operation Unified Response did not significantly limit training opportunity. At the same time, other key skills, including small boat and helicopter operations were well exercised. Similarly, the SH-60B helicopters have primary missions of surface surveillance and anti-submarine warfare that were not exercised during the relief operations, but the aircrews gained experience in overland mission planning and operating from dynamic landing zones that would be difficult to duplicate in routine training.<sup>42</sup>

The hospital ship, USNS *Comfort* (T-AH 20), was activated to provide higher level medical facilities and deployed from Baltimore, MD, on 16 January, arriving off Haiti on 20 January with surgical operating teams including an orthopedic surgeon.<sup>43</sup> While on station, doctors onboard performed 843 major surgeries and delivered nine

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<sup>41</sup> Carl Meuser. "Lay Your Ship," *Naval Institute Proceedings* 137, no. 1 (January 2011): 27.

<sup>42</sup> Clarkson, Hanson, and Boyce, 15.

<sup>43</sup> Keen et al., 86.

babies. Although the nature of the injuries treated differed somewhat from what would be experienced in heavy combat, the orchestration of providing tiered medical care to thousands of injured Haitians exercised the same skills that would be required of a hospital ship supporting a combat operation.

In addition to the vessels operating from the sea, JTF-H established a subordinate task force, JTF Port Opening, led by Rear Admiral Sam Perez, at the Port-au-Prince port facility to reopen and run the port until Haitian organizations were ready to resume control.<sup>44</sup> A joint Army and Navy team built from elements of Naval Beach Group Two, Army and Navy watercraft, and an Army Harbormaster Unit used Joint Logistics Over-The-Shore (JLOTS) capabilities developed for assault follow-on echelon resupply to move humanitarian aid from ships at anchor to shore.<sup>45</sup> Although the cargo set differed from what would be expected during a combat operation providing logistics support over the beach, the individual craft operations and command and control of the offload were nearly identical, providing unparalleled joint training to the JLOTS units.

### ***Summary***

Overall, Operation Unified Response was a complex, joint, multi-national, interagency operation that provided military-unique capabilities in the critical days and weeks after the earthquake to save countless lives. In particular, the Haiti relief efforts tested the ability of the Army Global Response Force to quickly deploy into an uncertain environment and establish order. It was also the most joint of recent disaster relief operations with units and personnel from the Army, Navy, Marine Corps, and Air Force all exercising their key capabilities within a Joint Task Force organization.

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<sup>44</sup> Vohr, 82.

<sup>45</sup> John C. Marcario. "New JLOTS Mission." *Sea Power* 53, no. 5 (May 2010): 70.

## **CHAPTER 4:**

### **JAPAN EARTHQUAKE/TSUNAMI RELIEF**

#### ***Overview of Disaster and Response***

On 11 March 2011, a magnitude 9.0 earthquake struck near the east coast of the Tohoku region on Honshu Island, Japan. In addition to the initial earthquake damage, a massive tsunami devastated the coastal region.<sup>1</sup> The damage included destruction of 129,500 homes, damage to over a quarter million other houses, and over a million homes left without water or electricity during a cold Japanese winter. Additionally, damage was severe to critical infrastructure, including roads, railways, bridges, and airports, hampering relief operations. In the end, almost 16,000 people died and over 5000 were injured due to the disaster.<sup>2</sup> Additionally, the earthquake damaged the Fukushima Dai-ichi nuclear power facility, resulting in a meltdown of the reactor core and release of radioactivity into the environment.<sup>3</sup>

One unusual aspect of the U.S. response to this natural disaster was the heavy presence of American military personnel in the country prior to the event. Almost 40,000 military personnel from all services were stationed in Japan and had frequently exercised with the Japanese Self-Defense Force. Many of these forces immediately mobilized to assist with relief efforts while other forces responded from nearby areas. Within three weeks of the earthquake and tsunami, the U.S. military assistance peaked at 24 navy

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<sup>1</sup> *Special Feature: Response to the Great East Japan Earthquake* (Tokyo, Japan: Japanese Government White Paper, 2011), 2.

<sup>2</sup> Jennifer D. P. Moroney et al. *Lessons from Department of Defense Disaster Relief Efforts in the Asia-Pacific Region* (Santa Monica, CA: RAND Corporation, 2013), 88.

<sup>3</sup> Andrew Feickert and Emma Chanlett-Avery. *Japan 2011 Earthquake: U.S. Department of Defense (DOD) Response* (Washington, DC: Congressional Research Service, June 2 2011), 4.

ships, 189 aircraft, and almost 24,000 personnel in direct support.<sup>4</sup> The relief effort, designated Operation Tomodachi (Japanese for “Friend”) was initially put under the command of Lieutenant General M. Field, commander of U.S. Forces Japan (USFJ) and the Fifth Air Force.<sup>5</sup> On 19 March, PACOM deployed elements of Joint Task Force 519 from Hawaii to establish a Joint Support Force<sup>6</sup> under the command of Admiral Patrick M. Walsh, commander of the U.S. Pacific Fleet, which took over the operation.<sup>7</sup> To facilitate coordination with the Japanese Self-Defense Force efforts, the Third Marine Expeditionary Brigade (MEB) deployed a forward command element (FCE) to Camp Sendai, the headquarters of the Japanese Joint Task Force, JTF-Tohoku.<sup>8</sup> Together, the FCE and JTF-Tohoku established a bilateral coordination center (BCAT) based on the model of a CMOC to coordinate aid delivery and relief efforts between the two militaries and representatives from the U.S. Embassy, USAID, and other relief organizations.<sup>9</sup>

Throughout the response, fixed-wing aircrews flew over 630 sorties in support of Operation Tomodachi, transporting 2.4 million pounds of cargo, 74,913 gallons of fuel, and over 900 passengers.<sup>10</sup> Additionally, naval forces distributed over 260 tons of relief

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<sup>4</sup> Feickert and Chanlett-Avery, 1.

<sup>5</sup> Cathal O’Connor . “Foreign Humanitarian Assistance and Disaster-Relief Operations: Lessons Learned and Best Practices,” *Naval War College Review*, 65, no. 1 (Winter 2012): 157.

<sup>6</sup> Structure was the same as a Joint Task Force, but designated as a “Support” force to better communicate that the mission of the force was support to the Japanese authorities.

<sup>7</sup> Yuki Tatsumi. *Great Eastern Japan Earthquake: “Lessons Learned” for Japanese Defense Policy* (Washington, DC: Stimson, November 2012), 17.

<sup>8</sup> Karl C. Rohr. “Operation Tomodachi: The eastern Japan earthquake humanitarian assistance mission,” *Marine Corps Gazette*, 96, no. 1 (January 2012): 28.

<sup>9</sup> *Ibid.*, 29.

<sup>10</sup> Beth Gosselin and J. G. Buzanowski. “Operation Tomodachi: Team Yakota,” *Airman*, 55, no. 5 (July/August 2011): 17.

supplies and flew 160 reconnaissance and search sorties.<sup>11</sup> By early April, the urgent requirement for relief support was over, and Operation Tomodachi operations formally ended on 1 May 2011.<sup>12</sup>

### ***Support from the Land and Air***

U.S. military support began almost immediately when Yokota Air Base served as divert field for eleven commercial airliners that could not land at Narita Airport due to earthquake damage. This included a requirement to keep six hundred airline passengers on base overnight. Sheltering and caring for an influx of people during a contingency was an established base mission and had been one of the skills rehearsed in an operational readiness exercise conducted in the week prior to the earthquake.<sup>13</sup>

33<sup>rd</sup> Rescue Squadron, with additional personnel from 31<sup>st</sup> Rescue Squadron, flew five HH-60G *Pave Hawk* helicopters from Kadena Air Base on Okinawa to Yokota Air Base on 12 March, immediately beginning rescue and recovery flights over the affected areas. Crews rescued one Japanese citizen from a damaged area, but the primary mission became reconnaissance of damage to assist decision makers in focusing relief efforts. They also worked to identify potential locations for a forward air hub, quickly identifying Sendai Airport as the best candidate.<sup>14</sup> These flights to locate and rescue personnel in an uncertain environment had considerable overlap with the combat search and rescue mission of the squadrons, although they did not include the hostile threat present in combat.

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<sup>11</sup> Ryan Zielonka. "Chronology of Operation Tomodachi," National Bureau of Asian Research. <http://www.nbr.org/research/activity.aspx?id=121> (accessed December 20, 2013).

<sup>12</sup> Moroney et al., 90.

<sup>13</sup> Gosselin and Buzanowski, 15.

<sup>14</sup> *Team Kadena and Operation Tomodachi (Friend) 11 March – 13 April 2011*. (Kadena Air Field: 18<sup>th</sup> Wing History Office, 2011), 5.



Air Force personnel from 353<sup>rd</sup> Special Operations Group arrived on 13 March, directly from participation in Exercise Foal Eagle in South Korea, and began work with local Japanese responders to clear heavy debris from the runway to reopen Sendai airfield for fixed-wing operations.<sup>15</sup> These efforts were augmented by the establishment of Task Force Fuji, built from the Camp Fuji Marine Corps training center, Marine Corps Combat Logistics Regiment 35 from Okinawa, and Army Combat Service Support Brigade 35 from Camp Zama.<sup>16</sup> Together, these forces cleared the runways sufficiently to allow aid flights directly into the damage area, an effort similar to potential missions to clear obstacles in a combat zone.

With the runways cleared, the 320<sup>th</sup> Special Tactics Squadron combat controllers established temporary air traffic control (ATC) to operate the airport despite the damage to the installed ATC systems, allowing MC-130H *Combat Talon II* flights to resume on 16 March.<sup>17</sup> Operations expanded on 20 March to include C-17 *Globemaster III* aircraft conducting bulk aid delivery directly to Sendai. Full commercial operations were restored by 13 April under Japanese control.<sup>18</sup> Opening airfields for resupply operations is a primary mission of the 320<sup>th</sup> Special Tactics Squadron and their operations at Sendai provided significant training.

P-3C *Orion* aircraft from Patrol Squadron Four also started flights from Okinawa on 12 March, surveying the Japanese coastline to generate initial damage assessments. In addition to identifying isolated Japanese personnel for relief support, the aircraft

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<sup>15</sup> Ibid., 11.

<sup>16</sup> Rohr, 30.

<sup>17</sup> *Team Kadena and Operation Tomodachi*, 15.

<sup>18</sup> Gosselin and Buzanowski, 15.

streamed video imagery to USS *Essex* (LHD 2) to support planning for upcoming landing craft operations.<sup>19</sup> ISR support expanded on 16 March with *Global Hawk* UAV and U-2 surveillance flights added to provide additional imagery and radiation monitoring in the area of the Fukushima Dai-ichi nuclear power plant.<sup>20</sup>

### ***Support from the Sea***

The Ronald Reagan Carrier Strike Group (RRCSG), including the aircraft carrier, USS *Ronald Reagan* (CVN 77), cruiser USS *Chancellorsville* (CG 62), destroyer USS *Preble* (DDG 88), and combat support ship USNS *Bridge* (T-AOE 10) diverted from operations near South Korea and repositioned off the coast of the damaged area, arriving within a week of the earthquake. The RRCSG was joined by additional ships, including destroyers USS *Fitzgerald* (DDG 62), USS *John S. McCain* (DDG 56), USS *McCampbell* (DDG 85), USS *Curtis Wilber* (DDG 54), and USS *Mustin* (DDG 89). These ships primarily served as operating and refueling bases for their embarked helicopters and aircraft from the Japanese Self-Defense Force, Coast Guard, and other agencies conducting rescue operations and delivery of emergency supplies to affected areas.<sup>21</sup> These operations provided the ships valuable experience in conducting helicopter operations and provided excellent training to helicopter crews in cargo deliver, but did not exercise the primary combat skills of the strike group, including fixed-wing flight operations, air defense, and control of the seas.

USS *Tortuga* (LSD 46) loaded amphibious landing craft and departed its homeport of Sasebo, Japan, immediately after the tsunami on 11 March to embark CH-

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<sup>19</sup> *Team Kadena and Operation Tomodachi*, 10.

<sup>20</sup> Feickert and Chanlett-Avery, 5.

<sup>21</sup> *Ibid.*, 5.

53E helicopters from a detachment in Korea and proceed north to provide assistance. Once arriving in the disaster area, *Tortuga* loaded 273 Japan Ground Self Defense Force (JGSDF) soldiers and 93 vehicles at Tomakomai, Hokkaido. The ship then transited to a heavily damaged area of Onimato and delivered the JGSDF personnel vehicles ashore by amphibious landing craft. Once the offload was complete, *Tortuga* remained on station as a staging base and distributed aid with its embarked helicopters.<sup>22</sup> This delivery of personnel and equipment from the ship to shore using landing craft and helicopters directly correlated with the ship's primary mission of amphibious operations.

The rest of the Essex ARG, USS *Essex* (LHD 2), USS *Germantown* (LSD 42), USS *Harpers Ferry* (LSD 49), and the embarked 31<sup>st</sup> MEU were operating in the vicinity of Indonesia when the disaster struck, but promptly transited to the area, arriving on 17 March. Once on station, the ARG conducted operations with both helicopters and landing craft to support the relief efforts. In particular, one utility landing craft (LCU) transported Tohoku Power Company work crews, trucks, and repair supplies from the mainland to the island of Oshima, facilitating restoration of power on 27 March for the first time since the disaster.<sup>23</sup> Similar to the *Tortuga*, these operations exercised key amphibious warfare skills for the ships, helicopters, landing craft, and Marines.

On 24 March, U.S. Navy divers assigned to Mobile Diving and Salvage Unit One, Explosive Ordnance Disposal Mobile Unit Five, and Underwater Construction Team Two, supported by USS *Tortuga* and USNS *Safeguard* (T-ARS 50), arrived in the port of Hachinohe to identify and clear underwater obstacles blocking the harbor. Major

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<sup>22</sup> Johnie Hickmon, "Essex ARG Concludes Operation Tomodachi Support," U.S. Navy, <http://www.public.navy.mil/surfor/lhd2/Pages/EssexARGConcludesOperationTomodachiSupport.aspx> (accessed December 20, 2013)

<sup>23</sup> Ibid.

clearance operations were completed in Hachinohe on 27 March and the forces proceeded to clear the Miyak harbor on 1 April and survey Oshima and Kessanuma before concluding operations on 8 April.<sup>24</sup> These missions, identifying and clearing underwater obstacles to open waterways for safe ship transit, were aligned closely with missions these units might be assigned to support amphibious or resupply efforts in a combat operation.

### ***Summary***

Overall, Operation Tomodachi was a complex disaster response operation that particularly exercised the ability of U.S. military forces to respond quickly using both forces stationed near the disaster area and those from the surrounding areas. It also was unusual in that the host country also possessed a very capable military, focusing the U.S. military actions on those areas where the Japanese Self Defense Force had limited capability. In particular, the U.S. military's ability to reopen Sendai airport and amphibious capabilities were instrumental in open relief channels to isolated victims of the earthquake and tsunami.

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<sup>24</sup> Ryan Zielonka. "Chronology of Operation Tomodachi," National Bureau of Asian Research. <http://www.nbr.org/research/activity.aspx?id=121> (accessed December 20, 2013)

## **CHAPTER 5:**

### **ANALYSIS ACROSS CASE STUDIES**

#### ***Overview***

As highlighted in the case studies, many parallels exist between the operations conducted by military forces during disaster relief operations and those for which they train in preparation for combat. There are also combat skills not exercised during these operations, decreasing proficiency and readiness with time unless appropriate mitigations are in place. A closer examination of specific skills across the joint functions demonstrates that command and control, intelligence, and sustainment are well exercised during disaster relief operations, yielding significant benefit to warfighting readiness within these functions. Protection, and movement and maneuver are more mixed, with some skills exercised and others not, while fires is almost fully absent from disaster relief operations.

In addition, disaster relief operations provide experience in soft power skills required for counterinsurgency operations, a primary mission of the U.S. military over the past decade. Lieutenant General Keen, commander of Joint Task Force-Haiti, emphasized this connection when he stated:

Field Manual 3-24, Counterinsurgency, states that the ‘focus of counterinsurgency is the people: provide for the people, protect the people, and convince the people of their government’s legitimacy.’ Haiti certainly illustrated that the focus of a humanitarian assistance mission must be the people. The fundamentals of counterinsurgency doctrine are very applicable in a foreign disaster relief mission.”<sup>1</sup>

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<sup>1</sup> P.K. Keen et al. “Foreign Disaster Response: Joint Task Force Haiti Observations.” *Military Review* 90, no. 6 (November/December 2010): 89.

Similarly, joint doctrine recognizes that “[h]umanitarian assistance and disaster relief activities employ the Joint Force to address partner needs and sometimes provide opportunities to build confidence and trust between erstwhile adversaries. They also help us gain and maintain access and relationships that support our broader national interests.”<sup>2</sup>

### ***Command and Control***

Command and control of a disaster relief operation presents many of the same challenges as a combat-related crisis response contingency operation at a level of complexity and uncertainty that cannot be duplicated in a training exercise. These characteristics make disaster relief operations prime opportunities to test command and control organizations, equipment, and doctrine under near-combat circumstances at much lower risk of friendly casualties than actual combat. In each of the case studies, shortfalls in command and control organizations and disagreements over application of doctrine were identified, leading to future improvements in the joint force’s ability to command contingency operations.

In Operation Unified Assistance, the designated commander of Combined Support Force 536 established subordinate Combined Support Groups to command relief operations in each of the three major geographic areas. Because the CSF commander was also the III MEF commander, he initially filled the CSG positions with other Marines from his organization. This caused confusion in the Indonesian relief efforts, however, because the CSG-Indonesia staff ashore did not have the communication infrastructure to control the robust sea-based relief effort, leading to a de facto shift of command to the

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<sup>2</sup> U.S. Joint Chiefs of Staff, *The National Military Strategy of the United States of America, 2011: Redefining America’s Military Leadership* (Washington DC: Government Printing Office, February 8 2011), 15.

commander of the Abraham Lincoln Carrier Strike Group (ALCSG). This dual command organization continued for over two weeks of the operation until Commander, ALCSG formally assumed CSG-Indonesia on 18 January.<sup>3</sup>

Similarly, the Air Force followed joint doctrine by standing up a Joint Forces Air Component Commander (JFACC) to control all air support to CSF-536. The Air Force expected all aircraft involved in the relief effort to be under tactical control of the JFACC, but the CSF commander assigned tactical control to the individual CSG commanders. The Air Force frustration with this decision was captured in General Deptula's after action report:

It is regrettable that so many years after the Goldwater-Nichols act ... that the process, doctrine, and procedures for the organization and execution of joint operations were not fully implemented during this operation. While air relief operations were successful, by dividing the command organization and authority for those operations among three separate components, and not placing the entire air distribution process under the command of the JFACC, CSF-536 missed an opportunity to conduct a more integrated, and perhaps more effective operation.<sup>4</sup>

In Operation Unified Response, on the other hand, the Joint Task Force and functional component commanders operated in accordance with doctrine, but the Southern Command (SOUTHCOM) staff, itself, was deficient. As the scale of the operation increased, SOUTHCOM discovered that its staff organization, optimized for steady state interagency engagement activities, could not easily adapt to handling a major contingency operation. Key authorities, like logistics, were diluted among directorates, and there was no established augmentation plan to integrate additional military personnel

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<sup>3</sup> Bruce A. Elleman, *Waves of Hope: The U.S. Navy's Response to the Tsunami in Northern Indonesia* (Newport, RI: Naval War College, February 2007), 119.

<sup>4</sup> U.S. Air Force, *With Compassion and Hope: The Story of Operation Unified Assistance* (Hickam Air Force Base, Hawaii: Office of History, Headquarters, Pacific Air Forces, January 2006), 62.

into the staff to support command and control of a major operation.<sup>5</sup> As a result, SOUTHCOM reorganized its staff into a more traditional joint staff organization within the first week of the operation to enable it to be more responsive to both steady-state and contingency operations.<sup>6</sup> Without Operation Unified Response testing the staff organization, its inability to handle a major contingency operation, as required by the Unified Command Plan, might not have been identified until a combat contingency arose.

Operation Tomadachi revealed similar deficiencies at the regional staff level. Although Commander, U.S. Forces Japan, had tactical control of all forces in Japan, it did not have operational control and was primarily a political and administrative staff without a robust operations branch. Once the operation grew beyond USFJ's ability to command, PACOM established a JSF, but left USFJ's political-military role in place, resulting in many staff members reporting to both the JSF and USFJ commanders, with unclear designation of which commander was in control of each aspect of the operation.<sup>7</sup>

In addition to testing joint command and control capabilities, disaster relief operations also provide robust experience in interagency and coalition operations, including opportunities to work with a large number of organizations that do not participate in military training exercises, but would also be involved in combat and post-combat operations. This was exemplified by the establishment of CMOC-like organizations in each of the operations to coordinate efforts between military, local officials, non-government organizations, and other interested parties. In Sri Lanka, it was

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<sup>5</sup> U.S. Government Accountability Office. *U.S. Southern Command Demonstrates Interagency Collaboration, but Its Haiti Disaster Response Reveals Challenges Conducting a Large Military Operation* (Washington, DC: Government Accountability Office, July 2010), 27.

<sup>6</sup> Ibid., 28.

<sup>7</sup> Jennifer D. P. Moroney et al. *Lessons from Department of Defense Disaster Relief Efforts in the Asia-Pacific Region* (Santa Monica, CA: RAND Corporation, 2013), 95.



called a Combined Disaster Relief Center<sup>8</sup>, while in Haiti, they were designated Humanitarian Assistance Coordination Centers (HACC)<sup>9</sup>, and in Japan, it was described as a Bilateral Coordination Center.<sup>10</sup>

These organizations for civil-military coordination were instrumental to successfully completing the relief operations in concert with a multitude of other supporting organizations. For example, the military conducted Haiti relief in support of USAID and in partnership with the government of Haiti, military forces from other countries, the United Nations Stabilization Mission in Haiti, and over a thousand non-governmental organizations (NGO).<sup>11</sup> Japan, similarly, included coordination with search and rescue teams from seventeen countries and over two-hundred NGOs.<sup>12</sup> The National Military Strategy calls for the United States to “seek to facilitate interagency [cooperation] and enable international interoperability before crises occur,”<sup>13</sup> and disaster relief operations provide unique opportunities to enhance these relationships and skills before they are required in a combat environment.

These opportunities are especially valuable in the development of junior leaders. Colonel Timothy McAteer, commander of 2<sup>nd</sup> BCT during Operation Unified Response, observed “coalition operations [with] UN forces, Nepal, Brazil, Jordan, Canada,... increased our proficiency in working with coalition partners from the BCT to [platoon]

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<sup>8</sup> Daren K. Margolin, “Humanitarian Assistance/Disaster Relief Operations,” *Marine Corps Gazette*, 89, no. 10 (October 2005): 10.

<sup>9</sup> Willie Robohn. “USS Bataan (LHD 5) and the 22MEU Bring Relief to the People of Haiti,” *Navy Supply Corps Newsletter* 73, no. 4 (July 2010): 34.

<sup>10</sup> Karl C. Rohr. “Operation Tomodachi: The eastern Japan earthquake humanitarian assistance mission,” *Marine Corps Gazette*, 96, no. 1 (January 2012): 29.

<sup>11</sup> P.K. Keen et al., 89.

<sup>12</sup> Moroney, 103.

<sup>13</sup> U.S. Joint Chiefs of Staff, *The National Military Strategy*, 15.

level.”<sup>14</sup> In addition, he highlighted the positive impact on his small unit leaders:

“Probably the biggest gains across the formation came in the area of leader development. Having to sort through complex problems in crisis situations, with little time to execute formal [military decision-making processes] forced leaders to quickly develop solutions and execute.”<sup>15</sup> These same leadership and decision-making skills would be required in a dynamic combat operation.

In exercising coalition operations during disaster relief, it is especially noteworthy that partners often include militaries that are not routinely in partnership with the United States. For example, before the Indian Ocean tsunami relief, the United States had limited military-to-military interaction with the Indonesian military, but the bonds built during Operation Unified Assistance led to greater cooperation in fighting terrorism.<sup>16</sup> Similarly, Operation Unified Response included working with a number of unusual partner militaries, including U.S. Air Force personnel loading a Federal Aviation Administration mobile air traffic control tower onto a Russian Antonov An-124 aircraft for delivery to Port-au-Prince.<sup>17</sup>

### ***Intelligence***

Disaster relief operations similarly stress intelligence systems and personnel in many of the same ways that combat operations do. Both operations depend on a clear tactical picture, enhanced by surveillance and reconnaissance collection, to keep a clear picture for decision makers to correctly apply capabilities and forces to the right

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<sup>14</sup> Timothy McAteer, e-mail message to author, December 9, 2013.

<sup>15</sup> Ibid.

<sup>16</sup> Elleman, 103.

<sup>17</sup> Ellery D. Wallwork, *Operation Unified Response: Air Mobility Command's Response to the 2010 Haiti Earthquake Crisis* (Scott Air Force Base, IL: Air Mobility Command, 2010), 62.

problems. Similarly, both rely on integration of theater and national intelligence sources to understand the broader operational environment. Additionally, operating within foreign countries, including nations that are not traditional allies, facilitates collection of location specific intelligence that could be valuable during future contingencies.

In all three disaster responses studied, there was heavy reliance on ISR flights to determine the scope of the damage and identify the greatest needs for relief. This tactical intelligence gathering was then integrated with higher level intelligence organizations, paralleling how tactical and operational intelligence is developed during combat operations. For example, in Operation Unified Assistance, Rear Admiral David J. Dorsett, the PACOM Director for Intelligence, noted that the “interagency partnership between the theater intelligence center and national intelligence agencies ultimately resulted in the highly successful delivery of information to forward-deployed forces.”<sup>18</sup>

Additionally, operating on the ground in the disaster areas, especially when located in areas not normally granted U.S. military access, helps develop more comprehensive local area intelligence. As an example, airdrops of supplies into Haiti during Operation Unified Response were conducted as sites surveyed during Operation Uphold Democracy in 1994.<sup>19</sup> Although in this case, intelligence gathered as part of a combat operation was used to support disaster relief, similar intelligence gathered during relief missions could facilitate combat operations in the future.

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<sup>18</sup> David J. Dorsett, “Tsunami! Information Sharing in the Wake of Destruction,” *Joint Forces Quarterly* 39, no. 4 (October 2005): 13.

<sup>19</sup> Wallwork, 53.

## *Sustainment*

Sustainment of military forces operating in disaster areas also presents many similar challenges as sustaining combat forces in contingency operation. In many cases, the disaster relief operations are even more challenging as explained by Colonel James Vohr, the SOUTHCOM J-4 during Operation Unified Response:

The capabilities required to respond effectively to a humanitarian assistance crisis are the same capabilities required for any expeditionary operation. This is certainly true for logistics units. ... Operations in Iraq and Afghanistan tend to take the edge off our expeditionary capability. Forces deploying to these operations tend to fall in on mature forward operating bases with established sustainment systems.”<sup>20</sup>

Major Paul R. Hayes from 3<sup>rd</sup> Expeditionary Sustainment Command observed that the sustainment skills extended down to the individual soldiers in his statement:

Haiti proved to be a first test of field craft skill for many Soldiers within the 3rd ESC. Essentially, it was back to the basics in Army field craft. ... The command realized early that some Soldiers (even young sergeants) had never erected a general purpose medium tent, emplaced concertina wire, washed their own clothes by hand, or eaten only meals ready-to-eat for 30-plus days.<sup>21</sup>

Similarly, deployment for disaster relief operations provides real-world opportunities to validate tables of allowance and the capabilities of fielded equipment. Many of the Army units deploying to Haiti were accustomed to being able to employ theater provide equipment during deployments and had to rely only on their organizational equipment for the first time in multiple deployment cycles.<sup>22</sup> Additionally, operational employment of assigned equipment identified deficiencies,

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<sup>20</sup> James A. Vohr. “Haiti Disaster Relief: Logistics is the Operation.” *Military Review* 91, no. 4 (July 2011): 82.

<sup>21</sup> Paul R. Hayes. “Deploying an Expeditionary Sustainment Command to Support Disaster Relief,” *Army Sustainment* 42, no. 6 (November 2010): 7.

<sup>22</sup> *Ibid.*, 8.

especially when used outside of exercise scenarios; for example, the JLOTS equipment deployed to Haiti was optimized for movement of military-standard twenty foot containers, but provided almost no capability to move the forty foot containers favored by commercial shipping companies.<sup>23</sup>

### ***Movement and Maneuver***

Movement of forces to disaster areas is nearly identical to movement of forces to combat areas of operation, stressing systems and organizations to assemble, embark, transport, and deliver personnel and equipment ready to operate soon after arrival. As observed by the 2<sup>nd</sup> BCT Commander following deployment to Haiti:

The BCT deployed all personnel and equipment on short notice. This included personnel and equipment by air and equipment by rail (to port) and sea (port to Haiti). Proficiency in the marshalling and preparation of equipment for movement greatly improved during the deployment and re-deployment. Additionally, the experience gained assisted in our deployment to Iraq in 2011.<sup>24</sup>

Maneuver of forces once in theater for a humanitarian operation, however, differs from combat because the objective is not to gain an advantage on an enemy. Additionally, in combat, maneuver often is conducted in concert with fires, but this is rarely the case in disaster relief operations. Disaster relief operations, however, routinely exercise many elements of combat maneuver, such as helicopter insertion, amphibious landing, and convoy movements, maintaining proficiency in those skills.

### ***Protection***

The level to which protection functions are exercised during disaster relief operations is heavily dependent on the circumstances on the ground in the disaster area.

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<sup>23</sup> John C. Marcario. "New JLOTS Mission." *Sea Power* 53, no. 5 (May 2010): 70.

<sup>24</sup> Timothy McAteer, e-mail message to author, December 9, 2013.

Although a disaster relief operation would not be conducted in an environment requiring full spectrum protection of assigned forces against an aggressive enemy, several of the operations were conducted in uncertain environments with threats ranging from unorganized looters to adversaries in unresolved revolutionary movements.

In both Operation Unified Assistance and Operation Unified Response, there was a sustained requirement to provide security at aid transportation and distribution sites to prevent seizure by looters, a mission carried out jointly by the responding U.S. military forces and local police and military. The Indian Ocean tsunami relief was additionally challenged by ongoing insurgencies in Indonesia and Sri Lanka. In Indonesia, the ongoing conflict between the Indonesian government and the Free Aceh Movement (Gerakan Aceh Merdeka, or GAM) in Aceh was a direct threat to relief forces, leading to the decision to sea-base the operation. Similarly, in Sri Lanka the Liberation Tigers of Tamil Eelam were active in the northern and eastern parts of the country, threatening the Marine Corps forces ashore.<sup>25</sup> Only Operation Tomodachi was conducted with no outside threat.

### ***Fires***

Of the joint functions, fires is the least employed during disaster relief operations and thus the most likely skill to atrophy. Although U.S. military forces bring weapons to most disaster relief operations for force protection, especially in areas with potentially hostile insurgencies, efforts are made to promote an image of the U.S. forces coming for peaceful support only, so heavy weapons and artillery are not employed. Only non-kinetic “fires” such as information operations have a regular role in disaster relief

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<sup>25</sup> Elleman, 36.

operations. Lieutenant Colonel Eric Flesch, 2<sup>nd</sup> BCT Operations Officer in Haiti, however, observed that not all skills atrophy: “Many aspects of ‘fires’ were conducted without the actual execution of indirect fires, suppressive fire, or close air support. Targeting procedures and the application of non-lethal effects were exercised at all levels.”<sup>26</sup>

### ***Financial Considerations***

Even with valuable gains in training and experience, disaster relief operations have real financial costs that, if paid out of training and operating accounts, could offset these gains through the inability to fund other training and exercises. In past disaster relief operations, however, this has not been the case because Congress has provided budgeted and supplemental funding to reimburse Department of Defense spending on relief operations. Relief operation costs are initially funded through Overseas Humanitarian Disaster Assistance and Civic Aid (OHDACA) funds within the defense department budget appropriations. These funds are managed by the Defense Security Cooperation Agency, which transfers money into the service operations and maintenance budgets to reimburse costs of conducting disaster relief operations approved by the Secretary of Defense.<sup>27</sup>

For Operation Unified Assistance, direct military cost totaled \$226 million, which exceeded the OHDACA fund available, resulting in expenditure of service operations and maintenance funds to cover the costs.<sup>28</sup> In May 2005, however, Congress passed a

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<sup>26</sup> Eric C. Flesch, e-mail message to author, December 30, 2013.

<sup>27</sup> Dana M. Herbert, James A. Prosser, and Rachele A. Wharton, *A Cost Analysis of the Department of the Navy Humanitarian Assistance and Disaster Response to the 2011 Tohoku Earthquake and Tsunami* (Monterey, CA: Naval Post Graduate School, June 2012), 14.

<sup>28</sup> Rhoda Margesson, *Indian Ocean Earthquake and Tsunami: Humanitarian Assistance and Relief Operations* (Washington DC: Congressional Research Service, March 21 2005), 16.

supplemental appropriation that provided \$950 million in tsunami relief funding, including \$226 million to reimburse service and OHDACA accounts for the cost of Indian Ocean tsunami relief.<sup>29</sup> Similarly, Operation Unified Response military costs totaled \$655 million, which was covered primarily out of service funds once the OHDACA account was exhausted. Congress reimbursed this expenditure with the passage of the 2010 Supplemental Appropriations Act.<sup>30</sup> In contrast, Operation Tomodachi costs remained within OHDACA resources. On 12 March 2011, the Secretary of Defense provided PACOM \$35 million OHDACA funding for Operation Tomodachi, and gradually increased funding authority to cover a total cost of \$80.4 million.<sup>31</sup> There was not a supplemental appropriation to reimburse these costs, but some of them were covered within the Japanese host-nation support to the U.S. military.

### ***Mitigations for Unexercised Functions***

As discussed, some combat skills, especially those associated with maneuver and fires, will degrade during disaster relief operations. Several factors, however, mitigate potential impacts, including the relatively short duration of disaster relief operations, the ability of some forces to continue some combat training even while providing aid, and post-operation training to restore degraded areas.

The strongest mitigation to degradation of combat skill proficiency has been the consistently short duration of disaster relief operations. Operation Unified Assistance lasted only 58 days from stand-up of CSF-536 until its disestablishment. Major combat

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<sup>29</sup> *Emergency Supplemental Appropriation Act for Defense, the Global War on Terror, and Tsunami Relief, 2005*, Public Law 109-13, 109<sup>th</sup> Cong., 1<sup>st</sup> sess. (May 11, 2005).

<sup>30</sup> *Supplemental Appropriations Act, 2010*, Public Law 111-212, 111<sup>th</sup> Cong., 2<sup>nd</sup> sess. (July 29, 2010).

<sup>31</sup> Andrew Feickert and Emma Chanlett-Avery. *Japan 2011 Earthquake: U.S. Department of Defense (DOD) Response* (Washington, DC: Congressional Research Service, June 2 2011), 1.



units assisted for even shorter periods: The Abraham Lincoln CSG was on station for 33 days and the Essex ESG for only 22. Similarly, although Operation Unified Response continued for 135 days, the XVIII Airborne Corps command post was relieved in 60 days, the 2<sup>nd</sup> BCT was back in Fort Bragg within 75 days, the USS *Carl Vinson* was on station less than 30 days, and all of the amphibious ships were returned to homeport or original tasking by 65 days after the earthquake. Operation Tomodachi was even shorter, lasting only 51 day and occupying the Ronald Reagan CSG and Essex ARG for only 23 days. Most combat skills require training at a longer interval to maintain proficiency, so short assignments to a disaster relief operation have minimal impact.

For other combat skills, especially those that are more perishable, there are sometimes opportunities to continue training even during disaster relief operations. For example, during Operation Unified Assistance, USS *Abraham Lincoln* sailed fifty miles off the coast of Indonesia at night to conduct sufficient fixed-wing flight operations to maintain the proficiency of the Air Wing pilots, which significantly degrade after two weeks of nonoperation.<sup>32</sup> Similarly, most Navy surface combatant training in air defense, anti-submarine warfare, and strike warfare is normally conducted almost exclusively using onboard simulation, so participating in disaster relief operations does not preclude continuing training required to maintain warfighting proficiency.

For skills that cannot be maintained during disaster relief, however, post-operation refresher training is critical to restoring combat capability to required levels. This is particularly true for ground forces such as the 2<sup>nd</sup> BCT after deployment to Haiti. Because the 2<sup>nd</sup> BCT was assigned as the Global Response Force (GRF) prior to the

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<sup>32</sup> Elleman, 104.

earthquake, they deployed to Haiti in January 2010 at a very high level of warfighting readiness. Upon their return to Fort Bragg in early April, they conducted several weeks of small unit tactical task refresher training, culminating with execution of a brigade-level Joint Forcible Entry Exercise (JFEX)<sup>33</sup> that restored the unit to sufficient combat readiness to reassume designation as the GRF by the end of April.<sup>34</sup>

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<sup>33</sup> Now called a Joint Operational Access Exercise.

<sup>34</sup> Timothy McAteer, e-mail message to author, December 7, 2013.

## **CHAPTER 6:**

### **RECOMMENDATIONS AND CONCLUSION**

#### ***Summary of Findings***

Although they do not employ all of the skill required for combat, disaster relief operations are complex contingency operations that provide unique training opportunities while furthering U.S. national interests. In a budget environment of decreasing resources for dedicated training, it is vital that the armed forces leverage these operations for maximum training benefit while remaining cognizant of mitigations required to maintain full-spectrum combat capability. In particular, disaster relief operations provide a prime avenue for developing command and control capability, from the Combatant Commander staffs down to the leadership skills of junior personnel. In addition to providing practical experience in many of the joint function, disaster relief operations are, by their nature, conducted alongside host nation and foreign militaries, interagency partners, and non-governmental organizations, providing critical experience that cannot be duplicated in training exercises.

#### ***Recommendations***

This enhancement of warfighting readiness can be maximized through incorporation of several recommendations into doctrine and policy, including assignment of forces to command and execute disaster relief operations and revision of OHDACA funding policies. Because disaster relief operations are, by their nature, short-notice contingencies, the initial response normally will be the forces at the highest levels of combat readiness, either forward deployed near the disaster or in a ready status in the United States. This was demonstrated in both the Indian Ocean tsunami, where carrier

and expeditionary strike groups operating in the theater were the major responding forces, and the Haiti earthquake, where the Army Global Response Force and Navy ships were the first forces to arrive. Recognizing, however, that these forces are the most heavily biased towards maneuver and fires joint functions, plans should include deploying follow-on forces to relieve these first responders before combat skills atrophy. This concept was demonstrated in Operation Unified Response when deployment of the 3<sup>rd</sup> Expeditionary Sustainment Command, a unit focused on the sustainment joint function, allowed the 2<sup>nd</sup> BCT to transition out of the operation.

Similarly, to leverage the testing and development of command and control organizations and staffs most effectively, theater plans for disaster relief operations should assign command to the same commanders that would direct combat contingency operations of similar size. By employing these commanders and their staffs to command and control a disaster relief operation, weaknesses in the organization or manning of the staffs, such as were identified within the SOUTHCOM staff during Operation Unified Response, can be identified and corrected before being tested by a more risky combat operation. Additionally, it will build the relationships between elements of the command and control organization and validate staff augmentation plans.

Finally, the policies concerning use of OHDACA funding for disaster relief operations should be revised to preclude depletion of service operating budgets during execution of the missions. In the past, OHDACA funding level has been sufficient for smaller disaster relief operations, but was quickly depleted during larger responses, including Operations Unified Assistance and Unified Response. Based on the likelihood of continuing demands for disaster relief operations, the OHDACA budget should be

increased to meet projected requirements while allowing for unexpended funds to be carried over into future fiscal years or reprogrammed to other engagement priorities to avoid “use it or lose it” situations at the end of the fiscal year. Additionally, the authorized use of OHDACA funds should be expanded to include post-operation training for forces that participated to restore degraded combat capabilities. This modification would have allowed the 2<sup>nd</sup> BCT to fund the training required to reset as the GRF without expending service training funds.

### ***Conclusion***

The Capstone Concept for Joint Operations (CCJO) requires development of globally integrated Joint Forces that “must be able to integrate effectively with U.S. governmental agencies, partner militaries, and indigenous and regional stakeholders.”<sup>1</sup> These skills can only be gained through real world experience in complex, dynamic environments, and military participation in disaster relief operations is a prime opportunity to gain this proficiency. Additionally, disaster relief operations provide significant training and experience, from the Combatant Commander’s staff down to the smallest units, across the joint functions, especially in command and control, intelligence, sustainment, and movement. In the face of an uncertain future security environment, it is critical that the U.S. military take full advantage of every chance to develop combat readiness, including when executing the disaster relief missions that are directed in accordance with the National Military Strategy.

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<sup>1</sup> U.S. Joint Chiefs of Staff, *Capstone Concept for Joint Operations: Joint Force 2020* (Washington DC: Government Printing Office, September 10 2012), 6.

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## VITA

### **CDR Mark W. McCulloch (USN)**

Most recently, Commander McCulloch served as Commanding Officer of Assault Craft Unit TWO, providing assault landing craft (displacement) and trained crews to support Amphibious Readiness Group deployments and other operations. He was commissioned in 1992 from the U.S. Naval Academy. Following initial training, he served as First Lieutenant and Anti-Submarine Warfare Officer on USS *SAN JACINTO* (CG 56) and as Main Propulsion Assistant on USS *JOHN HANCOCK* (DD 981). Following an assignment at Afloat Training Group, Mayport, he completed Department Head tours as Chief Engineer on USS *ROBERT G. BRADLEY* (FFG 49) and USS *GETTYSBURG* (CG 64), a tour as Material Officer for Commander, ENTERPRISE Carrier Strike Group, and as Executive Officer on USS *PAUL HAMILTON* (DDG 60). He then was assigned as the Surface Strike/Anti-Surface Warfare Requirements Officer on the OPNAV staff. CDR McCulloch perviously earned a Bachelor of Science from the U.S. Naval Academy and a Master's of Science from Johns Hopkins University, both in Computer Science. He is scheduled to report to U.S. Pacific Command in July 2014.